

JOURNAL OF
Neurobiology

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Cover: An actin-rich wave caught as it traveled along one branch of the axon of a rat hippocampal neuron. The cell was stained with DM1A antibody against tubulin to visualize microtubules (green) and Texas Red Phalloidin to visualize actin filaments (red). Such growth-cone-like "wave" structures are regularly produced at the base of axons and move along the axon toward the tip, where they are associated with bursts of growth. When a "wave" encounters a branch point such as the one shown here, it often selectively travels down on branch or the other and the growth spurt then likewise occurs selectively in that branch. See the article by Ruthel and Banker, pages 97-106, this issue.

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